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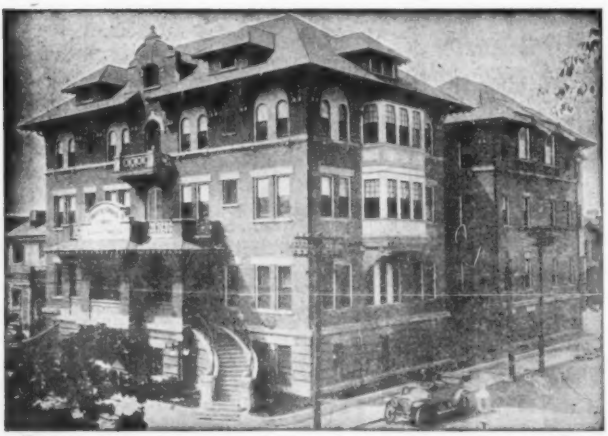

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The Journal OF THE South Carolina Medical Association

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EDITORIAL

Dr. C. W. Kollock of Charleston elected Chairman of the Executive Committee, American College of Surgeons.

Dr. Charles Wilson Kollock,
86 Wentworth Street,
Charleston, S. C.

My dear Doctor Kollock:—

At a meeting in Montreal of the states which had not been previously organized the state representatives of South Carolina unanimously elected you as Chairman of the State Executive Committee.

Enclosed in this letter you will find a reprint giving the plan of organization which has been adopted now by every state in the Union and every province in Canada. It outlines briefly the principles of the state organization of the Fellows of the College and its purpose.

The central office is grouping various states together and arranging meetings of the states in such a way that the speakers for the meeting which we wil lbring may attend three or four state meetings on one trip. By arranging this state grouping in point of time, we are able to cooperate intelligently and efficiently with the various states. It would be a convenience for us to know as early as may be, whether the date, which appears below my signature, will be a convenient time to hold your first state meeting.

Any further information which you may desire I will be glad to send upon receipt of a letter from you.

Very truly yours,
(Signed)T. E. Allen.

Date of meeting Jan. 17-18.

ORGANIZATION OF STATE AND PROVINCIAL CLINICAL SECTIONS OF THE CLINICAL CONGRESS OF AMERICAN COLLEGE OF SURGEONS

In order to promote within the individual states and provinces the purpose for which the American College of Surgeons was founded, the Board of Regents of the College has authorized the organization of clinical sections in each of the states of the United States and the provinces of Canada.

In this connection, the following suggestions have been compiled for the purpose of providing a standarized organization for all sections of North America:

CLINICAL SECTIONS

Each clinical section shall consist of the Fellows of the American College of Surgeons resident within the given state, and shall be known as "The (name of state) Clinical Section of the American College of Surgeons."

The section shall vest the general management of all state matters in a body of state representatives.

STATE REPRESENTATIVES

The state representatives shall consist of one representative for each congressional district, and two senatorial representative at large, each to be elected by the Fellows of the state for a term of two years, one-half of the number to be elected each year by ballot through the central office two weeks before the annual meeting of the national Clinical Congress. This body will correspond in the state to the Board of Governors of the College. Similar organizations will be effected in the provinces of Canada.

The state repesentatives shall meet in executive session annually for the transaction of such business as may be brought before them by the executive committee. Such meetings shall be called by the secretary of the executive committee, at the direction of the committee as a whole. A majority of the state representatives shall constitute a quorum for the transaction of business.

In the event of the death, resignation, or withdrawal from the state of a state representative, his successor shall be elected at the next regular or special meeting of the state representatives; but the executive committee may appoint a Fellow in the state to serve until such election takes place.

EXECUTIVE COMMITTEE

At the annual meeting of the state representatives, an executive committee, to consist of from three to five Fellows, shall be elected from among the state representatives. The executive committee shall correspond to the Board of Regents of the College and be the supreme executive body within the state.

The officers of the executive committee shall be a chairman and a secretary who shall serve for a term of one year. The chairman shall preside at all meetings of the executive committee and of the State representatives, and be the president of the annual sessions of the clincial section. The secretary shall act also as the secretary of the state representatives and the state section. In the event of the death, resignation, or withdrawal from the state of the chairman, a counselor, to be known as vice-chairman, shall assume the duties of the chairman until that office is filled by election at the next meeting of the state representatives.

The duties of the executive committee shal be those ordinarily performed by a governing board, namely:

1. To create, appoint, and direct all committees.
2. To call all meetings of the section not already provided for;
3. To conduct annual state clinical meetings as hereinafter provided;
4. To transact all detail business devolving upon the state representatives in carrying out the object of the organization;
5. To transact all business not already provided for that may pertain to the organization;
6. To direct the manner in which the books and accounts of the section shall be kept, and caused to be examined from time to time the accounts and vouchers for moneys received and paid out, and submit the same to the central office for approval;
7. To keep a record of state proceedings, and submit a report regarding such proceedings to the state representatives for approval at the next succeeding meeting, and to the central office.

The executive committee shall hold meetings at such time and place as it may from time to time determine. A majority of the memebers of the executive committee shall constitute a quorum for the transaction of business.

ANNUAL SESSIONS

The section shall hold an annual session of from two to three days at such time and place as may be determined upon by the executive committee, which may include:

1. Surgical and diagnostic clinics and clinical demonstrations to be conducted during the mornings by Fellows of the College, and invited associates of the city in which the meeting is held; these clinics to provide for practical demonstrations of the group method of diagnosis and teaching, in co-operation with internists, pathologists, roentgenologists and other specialists of medicines;
2. Afternoon meetings for the laity to be addressed by invited laymen and surgeons.
3. Scientific and literary papers relating to the art and science of surgery,

to be presented at evening meetings by local surgeons of prominence and by invited guests from outside of the state or province;

4. Annual meeting of the state section, of the state representatives, and of the executive committee.

COMMITTEE ON INVITATIONS—The committe on invitations shall determine the list of invited guests, based upon the following:

Attendance at the clinical sessions shall be limited to Fellows of the College and invited guests, the latter to include candidates for fellowship approved ethically by the respective State Credentials Committee, and include also internists, pathologists, roentgenologists, sanitarians, editors of mechanical journals, and other medical men of influence.

Invitations to attend the afternoon and evening sessions shall be extended to the Chamber of Commerce, Rotary Club, Women's Club, and other prominent lay individuals and organizations.

COMMITTEE ON ARRANGEMENTS—The committee on arrangements shall visit the hospitals in the city in which the meeting is to be held, and determine if their combined clinical facilities will accomodate the estimated number of guests and Fellows who will attend the meeting, as reported by the committee on invitations.

This committee shall consider hotel accommodations and ascertain if the facilities of the city in this conection will provide amply for the entertainment of all guests and Fellows who expect to attend. The hotel selected for headquarters should provide:

1. A ball-room or assembly hall for afternoon and evening meetings;
2. A room adjoining, to be used as registration and ticket bureau.
3. A corridor to be used for the display of clinical bulletins.

Note—2 and 3 may be the same room, if it is large, and it is desirable that all of these rooms should be on the same floor.

The committee on arrangements shall select a capable young surgeon to serve as editor of the daily clinical bulletin, and a press committee which shall edit and revise the reports of all clinical proceedings for transmission to the medical and lay press.

HOSPITAL—Each hospital in which clinics are to be given shall appoint a committee of three, representing all services, which shall be responsible for the conduct of the clinics held in the hospital. One member of this committee shall be specifically charged with the duty of telephoning or otherwise transmitting each afternoon to the bulletin editor at headquarters the list of the coming day's clinics. Each hospital shall provide an individual who shall honor or take up the tickets issued at head quarters for each specific demonstration.

CO-OPERATION OF CENTRAL OFFICE—A representative from the central office will work with the executive committee and co-operate as far as may be necessary in carrying out the details of arrangements at headquarters, prepare tickets, clinical bulletins, etc., and assist in the smooth running of the meetings.

The central office will aid through recommendations in the selection not only of prominent clinicians but also of speakers of note for the afternoon and evening meetings. To this end it is essential that the secretary of the executive committee shall at all times keep in close touch with the central office of the College.

CO-OPERATION OF THE PRESS—Impersonal, ethical publicity is essential in order that the state clinical meetings may exercise the widest influence. To this end, the press committee, appointed by the committee on arrangements shall see to it that invitations to all open meetings and summaries of daily clinical bulletins are given to properly selected sources of publicity.

All reports of actual clinical procedure submitted to the public press shall be carefully censored by the press committee, which shall see nothing is published which does not conform to the strictest standards of professional ethics.

FINANCES—It is the wish of the College that no extra expense shall be borne by the members of the College in the city in which the meeting is to be held. An allowance of not to exceed $3.00 per year for each member of the College in the state will be made by the central office to help defray the expenses of conducting the state meeting. There will be no individual registration fee. Exhibits by publishing houses and dealers in surgical instruments and supplies may be arranged for at the discretion of the executive committee.

REGULATIONS AS TO SKIMMED MILK PRODUCTS IN SOUTH CAROLINA

We are glad to give space to the regulations recently adopted by the executive committee of the State Board of Health in reference to the sale of condensed, evaporated or powdered skimmed milk. These regulations have been in effect since 1912, except as to powdered skimmed milk, which did not exist at that time as an article of commerce. These regulations were passed solely for the benefit of the ignorant to prevent the use of evaporated, condensed or powdered skimmed milk, where the use of whole milk is the desired object of the purchaser.

REGULATIONS—The sale of condensed, powdered or evaporated skimmed milk is allowed but it shall be unlawful to sell the said condensed, powdered or evaporated skimmed milk except under the following regulations: In addition to compliance with all existing laws, the said condensed, powdered or evaporated skimmed milk to be sold in packages or

containers containing not less than one gallon, (10 lbs.) which packages or containers shall be hermetically sealed at the time of sale; also, at the stores, groceries, shops, or places where such condened, powdered or evaporated skimmed milk is sold a sign printed or painted in black letters on white background and on which the letters at least five inches high and worded as follows, must be displayed: "Condensed, powdered or skimmed milk should not be fed to babies, children, or invalids—it is lacking in food value."

THE ART IN MEDICINE

The time was when a physician went to the bedside of his patient armed with his wits, and little else. Consequently and necessarily his wits were kept on edge and the practice of medicine was not so much science as art.

Nowadays the physician encounters disease with tools which science has hammered out and his energies go largely toward the sharpening of his tools and the making of new and more perfect ones, to the exclusion, largely, of the art of the forefathers.

The tools of modern medicine are mainly forged by those who do not have the practical use of them. Consequently many are based upon theory and the dogmatism of those working within narrow boundaries. Naturally the recognized test of today may be scrapped tomorrow: the trusted apparatus of the present may be entirely discredited or materially altered in the future.

A new art in the medicine of today lies in the use of the various tests, apparatus and procedures, without misusing or abusing them. It is the wise physician who can gather up the scattered evidence in the case and make it fit the main lead, the patient himself—who has the knowledge and ability to pick out the useful and disregard the irrevalent and the useless. There are some tests which may be final for some things; the most of them are only pieces of evidence and to be used as symptoms or signs. The art lies in piecing them together.

Too much of the old art of medicine seems in danger of loss in the maze of scientific procedures. Possibly the best policy is to be the first to try the new and the last to lay the old aside. The patient is still a sick person and not a disease.

K. M. L.

ORIGINAL ARTICLES

HOSPITAL STANDARDIZATION IN IN SOUTH CAROLINA

By J. R. Young, M. D.,
Anderson S. C.

FOR THE past decade the Council on Medical Education of the American Medical Association, the American Hospital Association, and other organizations interested in hospital welfare have been thinking and planning towards improving the character of service rendered by hospitals. This interest in hospital efficiency seems to have grown out of the nation wide campaign, fostered by the Council on Medical Education,, of raising the standard of medical education. For it soon became apparent that improving medical education would not be possible unless at the same time hospital efficiency was raised. If the fifth year, or hospital year, be required

(Read before the South Carolina Medical Association, April 21, 1920, Greenville, S. C.

of medical graduates then a sufficient number of hospitals that afford capable training for internes must be provided.

In the year 1914 it was found from a careful survey that for the four thousand medical graduates, the hospitals of the entire country only provided satisfactory internships for slightly over two thousand. Not so much **more** hospitals as **better** hospitals were needed, for there were then about two thousand hospitals which either did not want internes or were not considered of sufficient merit to train internes. The Council instituted a vigorous campaign to overcome this defect setting forth minimum requirements in service and equipment which a hospital must have to satisfactorily train internes. So effectual has this campaign been that this year satisfactory internships are available for practically all graduates.

Another factor which has aided in developing the nation wide desire for improving hospital service has been the activities of numerous bodies in disease prevention, as for instance, the United States Public Health Service. It has been the uniform verdict of federal, state, municipal, and privately endowded agencies that disease prevention can best be carried out when work revolves around a hospital.

Other organizations as the Catholic Hospital Association; numerous perodicals, as the Modern Hospital; several tsate boards, notably the Boards of New Jersey and Pennsylvania, have aided greatly in bringing about a nation wide desire for an improved hospital service.

But the agency that has done more than any other to crystalize medical thought on the subject of hospital standardization is the American College of Surgeons. Since its beginning in 1913 it has done much constructive work in this field. To start with, the College made a survey extending over two years, of hospital conditions in this country and Canada. This study confirmed the findings of the Council on Medical Education. It made clear: (1) that the hospitals are inestimable importance as clinical training centres in medical education; (2) that the hospitals offered the most tangible access to problems of public health; and (3) that the hospital authorities (doctors, superintendents, and trustees) would welcome any constructive plans by which they might better accomplish their own aim in education and the care of the sick and injured.

After these encouraging findings were formulated the College, through its General Hospital Committee (which was born to meet the need) began working out a program. This gradually took the following concrete form:

First—To define a minimum standard,

Second—To enlist the co-operation of the hospitals in fulfillment of this standard,

Third—To publish from time to time, the list of hospitals which fulfilled the minimum standard.

The minimum standard was then defined. It had been gradually coming to light during the past two years and is the product of no single mind. It grew out of straight thinking among the clearest minds in medical and hospital work on this continent. The basic idea on which the minimum standard rests is this: that primarily hospitals exist for the patient and not for the convenience or enrichment of the doctors or trustees. They should then be conducted not merely as temporary boarding places for the sick and injured but as service stations where the best possible care is provided. Viewed in this light all the items in the fol-

lowing minimum standard of requirements seem to be not only desirable but entirely reasonable.

The minimum standard:

1. That physicians and surgeons privileged to practice in the hospital be organized as a definite group or staff. Such organization has nothing to do with the question as to whether the hospital is "open" or "closed," nor need it effect the various existing types of staff organizations. The word **Staff** is here defined as the group of doctors who practice in the hispital.

2. That membership upon the staff be restricted to physicians and surgeons who are competent in their respective fields and worthy in character and in matters of professional ethics; that in this latter conection the practice of the "division of fees" in any guise whatever, be prohibited.

3. That the staff initiate and, with the approval of the governing board of the hospital, adopt rules, regulations, and policies governing the professional work of the hospital; that these regulations specifically provide, (1) that staff meetings be held at least once a month, (2) that at regular intervals the staff review and analyze their clinical experience in the various departments, such as medicine, surgery, and obstetrics; the clinical records of both private and free patients to be the basis for such review and analysis.

4. That accurate and complete case records be written and filed in an accessible manner in the hospital, a complete record being one which includes the personal history; the physical examination with clinical, pathological, and X-Ray findings when indicated; the working diagnosis; the treatment, medical and surgical; the medical propress; the condition on discharge with final diagnosis; and, in case of death, the autopsy findings when available.

5. That clinical laboratory facilities be available for the study, diagnosis, and treatment of patients; these facilities to include at least chemical, bacteriological, serological, histological, radiographic, and fluroscopic service in charge of trained technicians.

Without commenting on the various requirements of this standard, we will report the opinion and experience of hospitals that have adopted it. It has been found practicable and workable for the hospital of fifty beds as well as for the hospital of five-hundred beds. Its fulfillment costs effort rather than money. The regular staff meetings with the critical review of the clincal service rendered have created an incentive for careful study, diagnosis, and treatment that has been helpful beyond measure.

After this review of the development of the idea of hospital standardization we may for our purpose define hospital standardization in South Carolina, as the adoption by the hospitals of the state of this minimum standard as their goal of attainment and institution by each hospital of earnest, organized effort in reaching this goal.

Because standardization is a process and not an act, its attainment must necessarily extend over a period of time. If a survey of hospital conditions in our state should reveal that very few now measure up in every respect to these requirements, we need not feel discouraged.

Last October, only 198 of the 671 hospitals of 100 or more beds could measure up fully. But one year before that, only 89 could qualify. So the idea is fast growing and Mr. Bowman, Director of the College, prophecies that in another year four or five hundred hospitals will meet this standard.

We have in South Carolina twenty-six general hospitals with two or three others now being built. Only four of

these have a hundred bed capacity. They have a total bed capacity of 1400. In 1918 they treated something over 22000 patients. This ratio was one patient to every seventy-five of the population. The average ratio for all the states is one patient to every twenty-nine of the population. We provide one bed for each 1100 of our population. The average ratio is one bed for each 486. Our hospital facilities are less than those of our neighboring states of Va., N. C., Ga., and Fla. And the Southern States as a group provide one bed for each 1000 of the population, while the rest of the country provides one for each 329.

These figures show at once that hospital accommodation in our state is below the average. This quantitative defect may be chargeable in part to the medical profession but those factors which give our Southern States such a high rate of illiteracy likewise enter into this problem. But the medical profession with the hospital management is directly responsible for any defects in the quality of hospital service. If those of us who do the work in the various hospitals of our state will at once begin an organized effort to improve the quality of service rendered, this will help more than anything else to support our quantitative defects The gospel of health restored, of injury relieved, of disease prevented will convert the public to the need of augmenting our hospital facilites better than any abstract preachment on the subject. This has been the experience in various communities where the public becoming interested in this organized effort to improve the quality of hospital service rendered, have responded more liberally to the appeals for financial aid.

How may the rank and file of physicians throughout the state help in attaining the third state wide improvement of hospitals?

1. By measuring the efficiency of the hospital to which they refer their patients by the yard-stick of the minimum standard. To illustrate, let them, when they visit their referred patients in the hospitals, note carefully the character of expert service their patients are receiving. Let them study carefully the written records of their patients. If these records are complete and accurate they furnish good evidence to the referring doctor that his patient has received the best care possible. If the record shows nothing but a nurses chart and a balanced account on the ledger and the patient has nothing but a scar and a clear receipt, the doctor who referred the patient may justly question the fairness of the transaction.

On the other hand, when a hospital is seriously trying to give full value to its patients, the referring physician can greatly aid by giving his full cooperation. He should not bring a chronic case to a hospital and expect a thorough work-up of the case followed by an operation, in time for him to catch the next train.

If the doctors throughout the state will do these three things (1) become familiar with the aims of hospital standardization; (2) study closely the progress which the hospital of their choice is making in the attainment of these aims; and (3) lend their full support and co-operation thereto, they will aid tremendously this organized effort of hospital improvement.

What about those of us who are doing hospital work? What benefits might we reasonably expect to follow a consistent and persistent effort towards standardization? (1) Better work by each individual of the group. This will undoubtedly follow because no one can continue to commit to writ-

ing for the review of his associates, his diagnosis and treatment without being stimulated to better work. (2) A thirst for research. This desire for better work will cause us to search and research our case histories and medical literature. We will want to sense our patients symptoms in terms of the pathology which we think he has and which our operative record shows that he did have. (3) This mutual co-operative work by all the members of the group will result in a group consciousness or institutional spirit. You may say that the spirit is an intangible something but it is the thing which our patient sees and feels while he is intrusted to our care and remembers when he has gone. It is the confidence inspiring thing which the friends of our patients sense when they visit the hospital. It is a composite thing made up of the motives, methods, and manners of the entire hospital force. It is more than morale. Morale is to this spirit what the glowing arc-light is to the electricity that supplies it. It is that sublime thing which merits and receives the benediction of the Great Physician. When an institution sufficiently nurtures this spirit it may cease to be a mere man-made organization, and become a living organization whose function is to heal and bless.

DISCUSSION—

Dr. E. A. Hines, Seneca: I think that this is one of the most important papers that has come before this body. I am only going to discuss it from one standpoint.

The House of Delegates yesterday was kind enough to act on the suggestion of the Secretary and to call into being the South Carolina Hospital Association. The House of Delegates has authorized the appointment of a chairman and secretary at once to take steps to bring this about and the Association is to foot the bill. I feel that this is an extremely important matter, and seeing some hospital executives in the audience I feel that it is timely to call their attention to this mater. As Chairman of Committee on Hospital Standardization during the past year I feel doubly interested in the question of Hospital Standardization. We hope the movement will bring into activity all the people who should be interested in elevating the standard of hospitals, the executives, members of boards of trustees, and the members of the various hospital staffs, and that they will come together at the next meeting in Columbia and adopt their own constitution and by-laws, and there will be no interference with the rest of the program. As Dr. Young has brought out we should exercise our influence and assume the responsibility of pushing this very important movement.

THE SIGNIFICANCE OF NERVOUSNESS IN CHILDREN

By Dr. J. F. Munnerlyn, M. D., Medical Director South Carolina State Hospital, Columbia, S. C.

THE NERVOUS child, unfortunately does not usually receive the close individual study warranted in cases of this kind, but, on the contrary, is too frequently looked upon as one who merely belongs to a certain disease category, requiring only palliative remedies. One author states very tersely "that parental fears are easily allayed when a trusted family physician or consultant, after examining a distinctly hypoplastic nervous child, states that he can find nothing organically wrong and dismisses the patient

(Read before the South Carolina Medical Association, April 21, 1920, Greenville, S. C.)

with a tonic and a few vague directions about keeping the child out of school, getting him into the country or giving him more milk to drink with the optimistic assurance that he is just a little nervous and will out-grow it after awhile." The same author states "that as the result of such advice more wrecked lives are due than to the actual dishonesty of the charlatan." When we consider that upon a proper development of the nervous system in the child depends most of that child's future happiness and usefulness, and possibly the peace of mind, health of body and the attainment of that childs posterity through all the days to come, we may appreciate the importance of an unstable nervous system.

In some of the nervous disorders of childhood we are dealing with plain physical causes or conditions such as brain tumor, brain abscess, brain injury, eye, ear, nose and throat troubles or, indeed, any physical condition that acts as a constant source of irritation to the child's nervous system. The prevention of nervousness as the result of such causes is theoretically simple and the task before us is clear enough. But in another type, known as the constitutional nervous disorders, we find a more complex problem. It has been authoritatively stated that probably seventy per cent (70%) of nervous children are of this type. In nervous disorders of this type heredity is an important factor. It is becoming more and more evident that in all these children who have certain slight or grave defects in their nervous make-up, something in their development has not gone right. This does not mean that they are intellectually deficient, but the fault lies in another direction, namely, "in that important realm of mental functions from which spring our desires and motives, and upon which chiefly depends our adaption to life." The laws of heredity as established by Mendel, Rosenhoff and others teach us that the child tends to inherit every attribute of both parents, therefore, parents possessing certain peculiarities or unit traits may be expected to have children, a certain number of whom will possess similar traits. In early infancy evidences of this imperfect development or fretfulness extreme sensitiveness to light and sound, convulsions, premature or late closing of fontanels, premature or late dentition precocity or delay in the development of muscular control, thum sucking, head rocking, thigh friction and manipulation of genitalia. In early childhood signs of an unstable nervous development are usually more noticeable and are muscular twitchings, tics and muscular incoordination, stammering, lisping, enuresis, tremor of fingers, restlessness and irritability. Such children are frequently extremely timid and shy, and at times, they may appear exceedingly moody or unduly sensitive. Others show strong emotional reactions, are inclined to get depressed at the slightest provocation or become unduly hyperactive—they are also frequently given to fits of anger or uncontrollable tantrums.

Such peculiarities as we have just mentioned are usually considered as being of a trivial nature and, indeed, they may be of a trivial nature if proper management of the child be instituted before it is too late But, unfortunately a great proportion of these children have their peculiarities aggravated by the baneful influence of an unsuitable environment, the result being that the subnormal is unprepared when adaption to new situations is required, such as those which come with adolescence, with stepping out into life, with marriage, with childbirth, etc. And here it is that we find the

beginning of a great many cases of insanity simply because the child who was born with a nervous predisposition has been misled by the faulty training of uninformed parents, or perhaps was not understood by the teacher in the school room. From a recent review of the case records of two thousand patients admitted to the South Carolina State Hospital it was found that forty per cent (40%) of those patients presented for many years certain signs of an impending danger. Such signs are usually looked upon as being unimportant, and while it was recognized that the child was always a little nervous or peculiar, nothing was done to correct this until the child had developed a hopeless form of insanity, which in most causes was the ultimate result of the child's inability to adapt itself to an entirely unsuitable environment. A brief report of a case selected from our records illustrates very aptly how a patient who became hopelessly insane had presented for many years certain signals of impending danger: A young woman sixteen years of age was admitted to the hospital two weeks after she had developed a mental condition regarded by the family physician as being incurable at home. The anamnesis reveals the fact that this patient was always a little nervous. She attended school with the result that she was able to get along with her studies fairly well, but she was considered as an unsociable child. She got along pretty well when left alone, but was easily irritated and appeared exceedingly embarrassed when placed in the company of strangers. The parents, not realizing the seriousness of the situation and thinking that they were acting for the best, decided to send the child away from home to a boarding school. The new environment, with its absolute lack of sympathy for an individual of this kind, was entirely unsuitable, the result being that the child at once broke down with a hopeless form of insanity. This case is only typical of a number of such cases that have come under our observation, illustrating the inability of such persons to adapt themselves to new situations.

While we do not know just what it is in the human body which is thus inherited and which is at the bottom of this imperfect development, we, nevertheless, have a right to think that the peculiarities which come from the imperfect development are not fixed, unchangeable traits like the color of our eyes or the shape of our noses, but that they may, if they are not too pronounced, be changed or at least modified. As shown by the study of many cases of these mental breakdowns, the fact is clearly revealed that neither the public nor the physicians have paid enough attention to these apparently trivial abnormalities and that few attempts were ever made to correct them before the final catastrophe occurred. Does it not then seem advisable that some organized plan for the study and control of such cases be instituted? At present the State is doing a very creditable work in promoting higher standards of health. By a gradual process of education and understanding as the result of certain studies many general unhygienic disorders that were formerly considered a scourge of mankind have now been practically eradicated. A great deal of time and thought have been given by most of us to our bodily health, but few of us seem to appreciate that there is such a thing as the mental side of our health It might, nevertheless, be said that proper mental health is absolutely essential for good bodily health and only when they are both given consideration can we have happiness, efficien-

cy and success. In a great many states particularly Massachussetts and New York, Psychiatric Clinics and Mental Hygiene Societies have been established. The purpose of these organizations is to work for the conservation of mental health, for the prevention of nervous and mental disorders and for the treatment of those suffering from such disorders. The results of this work have been most gratifying, and in those states where they have been instituted this phase of the health work is considered just as important as that which has to deal with the control of tuberculosis, venereal diseases, etc. If similar methods were adopted in South Carolina, under the direction of trained psychiatrists whose duty it would be to educate the people along such lines and to conduct clinics for the treatment of nervous and mental disorders, it is certain that many unfortunate individuals, who at present are steering directly to an inevitable mental breakdown, could be helped to live happy and efficient lives.

DISCUSSION—

Dr. J. LaBruce Ward, Columbia: Mr. Chairman, this paper of Dr. Munnerlyn's is extremely important. I do not recall having heard one along these lines before this organization. The State Board of Health as we all know has been doing very good work along the lines of preventing smallpox, hookworm and other contagious diseases and it is now time, I believe, that they should extend their activities to mental hygiene. This is a very important subject and difficulties in undertaking this work will be very much greater than in the prevention of smallpox and tuberculosis because it will be more difficult to teach the public to recognize early these nervous manifestations. The burden of this propaganda rests on the medical profession and the activities of the State Board of Health. It will have to be done largely through the medical profession and from the practical standpoint it seems to me our job is to teach parents that when a child shows any manifestations of nervousness the child is abnormal and particularly is it our duty to teach parents to have such a child thoroughly examined. It may be that the child is better off at home, but in many instances the child is better off in an institution. The child we often find is out of tune with his surroundings. Often the surroundings of the home aggravate his condition owing to the nerves of his parents. The child is often made worse by association with his parents, especially his mother if she happens to be nervous. It has been said that some children are born nervous, some acquire nervousness and some have nervousness thrust upon them. Those born nervous can be well cared for by the eugenists who may look after the parents for several generations, but for the other two classes we can do very much. I believe the profession has a very wide field of usefulness in teaching parents what the normal child is like and that when a child is nervous that child should be examined and the advice of the physician should be carried out. In this way and in this way only will we keep the nervous child out of the insane asylum and give him the best opportunity to develop into a normal individual.

DISUSSION—

Dr. J. W. Babcock, Columbia: I have already referred to psychiatry as the younger sister if not the step sister of the other branches of medical science. I think that the fact that it has not been more closely associated with mental science is largely responsible for the lack of interest the profes-

sion has shown The mental disorders have passed through the same stages of evolution as the other branches of medical science. First it was a matter of collecting facts, and then a description of the facts. There has been a greater advance in our knowledge of mental disorders in the last twenty years than in the previous two thousand years. We have now passed from the descriptive stage to the interpretative stage. We are no longer satisfied with the mere observation of syptoms. Nothing happens in the mental any more than in the physical world without a cause and the cause requires explanation and interpretation from the position of the modern way of looking at man from the standpoint of the mechanism of adjustment. The mechanism of adjustment is very helpful to the physician. From the viewpoint of the adjustment of the personal ego to a possible environment we come to regard these mental disorders as types of reaction and the men we say are in sane are trying to establish an agreeable adjustment with their environment. It is difficult to grasp the fundamental idea of fmanic depressive insanity and dementia praecox, but if the general practitioner can grasp this fundamental concert of reactions he will be in a position to prevent these types of so-called insanity. The appeal of this subject is very much stronger and the lessons are very much easier and the problems of readjustment very much simpler in looking at the problem of insanity in that way.

DISCUSSION—

Dr. C. F. Williams, Columbia: I have here for distribution a contribution from the State Hospital on this subject with suggestions for the protection of the mental health of children.

DIPHTHERIA

By E. W. Carpenter M. D. Greenville, South Carolina

THIS AGE long disease like the poor is always with us, and at this season instead of withering like the grass and flowers, it is renewing its youth and springing up like mushrooms after a warm summers rain. From 1905 until two or three years after this state began the free distribution of antitoxin, the ringing of the phone on a dark cold, blustering night generally meant a long country ride to do an intubation. Our trials did not end here because there usually followed several return trips before the tube could be dispensed with. These memories are night mares. What a joy it will be when this state has a hospital in every community where all classes of diseases can be cared for. Instead of leaving these little ones miles away from help facing the dangers of a coughed up tube, can be placed in these institutions where help is always at hand in case of emergency.

Diphteria appears more prevalent this Fall than for several years and we wish to emphasize just two essential features in its treatment. First—Use antitoxin early and if in doubt about the size of the dose, double it. The efficacy of antitoxin is in the following order: Subdermal, intra muscular. Intra venous. Second—When a supposed spasmodic croup does not respond promptly to accepted remedies, treat it as a case of laryngeal diphtheria. There are no pathognomonic symptoms of this disease except perhaps the visible presence of a membrane and even when a membrane is present it may not be diphtheritic.

If dyspnoea becomes constant and shows no signs of subsiding and is of such a degree that the extraordinary

muscles of respiration are kept in use, then INTUBATE. If this is not possible, make every preparation to open the trachea and do not wait until death is imminent, but do it before the child is exhausted from constant and increasing dyspnoea.

Recently we have ben called to several cases where intubation was necessary. One case had been dead two hours when the doctor arrived. Intubation is preferable to tracheotomy in most cases, but in the absence of some one who can intubate, every physician should open the trachea rather than risk death by suffocation. In an emergency we have opened the trachea without any kind of anaesthesia and with a razor and a pair of hair pins bent, to answer as retractors.

EPILEPSY AND ITS TREATMENT

By Newdigate M. Owensby, M. D.
Atlanta, Georgia.

BEFORE entering into the discussion of the treatment of a disease it is always well to inquire into its etiology, otherwise we are forced to resort to theorizing and empiricism.

In treating epilepsy the majority of physicians have neglected to make careful inquiry into the case at hand and have been content with resorting to the rankest kind of empiricism with the hope that it would reduce the convulsions to a limited number per month or year. Very few have entertained hopes of an ultimate cure, but on the other hand have regarded it as "the will of God" and something to be endured rather than cured. This, to say the least, has not been very scientific and has not strengthened the standing of the medical profession with the laity.

On making a very superficial examination into the etiology of epilepsy we are at first confronted with the fact that it is due to so many widely different conditions that we are no more justified in the use of the term epilepsy to cover all the various epilepsies than we could be justified in the use of the term fever to describe all the various fevers. Were I to present a paper on 'fever and its treatment,' you would be puzzled to know what form of fever I expected to discuss, and since the title of this paper has been given as 'epilepsy and its treatment' you should be puzzled as to what form of epilepsy I expect to discuss. In view of the fact that I expect to discuss more than one form of epilepsy the title assigned me should have been 'the epilepsies and their treatment.'

On making a closer examination into the etiology of epilepsy we are forced to the conclusion that it is a manfestation of many widely different conditions and should not be regarded as an entity any more than we regard the chill, which is a manifestation of many widely different conditions, as a seperate entity. It may be the outward manifestation of functional nervous conditions, insanities, toxemias such as uremia and alcohol, organic disease such as cerebral syphilis and tumors, and many other conditions. This would seem at first to be rather difficult to conform with the fact that certain changes are found in the brain of people dying of epilepsy, but are we sure that this abnormality can be detected in the nervous system before the disease makes its appearance. The severity of the discharges from the grey matter is sufficient to cause alterations in its structure and it is possible that the chromotolysis of cells, gliosis, etc., are secondary conditions. In those cases which are supposedly inherited there is not alteration in structure that can be demonstrated by the mi-

croscope prior to the beginning of the seizures.

On examnining into the phenomena of the fit or discharge from the grey matter we find that the brain can react in exactly the same manner to various stimuli and that the mechanism by which the convulsion is induced is common to all. The stimuli might initiate some vascular or mechanical change in the brain such as cerebral anaemia which causes the convulsive seizure; it might cause a chemical change which sets free some chemical poison that causes a faulty distribution of energy and in this manner bring on the convulsive seizure. This last explanation of the fit would seem to be the most logical at the present time in view of the increased knowledge of defective metabolism and endocrine disorders.

Alzheimer has made a pathological grouping as the result of the histological examinations of sixty three cases and states that sixty per centage had a very obscure etiology. The changes observed in these sixty per cent of cases were:

(a) Those with schlerotic changes in Ammons horn.

(b) Those with superficial gliosis of the hemispheres.

(c) Those with signs of an acute process (status) besides a and b.

Any of those changes could have been the result of the severity of the discharges from the grey matter and doubtless were secondary conditions. Moreover it is possible that a disordered thyroidal pituitary, thymus, or parathyroidal metabolism, or a toxemia could have been the primary cause.

In treating the epilepsies we should make a study of each individual case and try and find the cause for the manifestation before the secondary changes have taken place. This is the only way that it is possible for us to get results. The general practitioner is the first man in the medical profession to see these cases and it rests with him whether the patient will become a direlict upon the shores of life or be given a chance to regain his heritage of good health. If he is too busy to make a study of the case or is not equipped with the necessary knowledge to recognize the underlying disease, he should refer the patient to a physician who possesses these qualifications. Since epilepsy is not an entity there is no treatment that applies to all cases designated by that term. For many years the epileptologists have been imploring physicians to send them their cases before they become chronic. They have begun to answer the call and cures are increasing daily. Epilepsy is often curable in its early stage but is seldom if ever, curable when it has become chronic.

Bromides have been so universally used in the treatment of epilepsy that a word regarding them will not be remiss. The late Dr. Wm. P. Spratling, whom for many years was our foremost epileptologist, stated to me, in private conversation that if the bromides had never been used the progress of the treatment of epilepsy would have been much greater. The modern view of bromide medication has been summed up by Jelliffe and White in their recent work on Nervous diseases. They stated that "when we realize, however, that the convulsion is not the disease, that it is not the cause nor a first expression even of the disease, but only its outward expression and the end result at that, it may be well questioned whether bromide meditation is rational. Experience seems to show that the fit postponed by bromides come to pass ultimately any way and that the bromides may, in fact, operate unfavorably by tending to produce a summation of attacks and thus increase the danger of status. Added to

this is the potentiality for disturbing digestion which the bromides possess so prominently, so it may be said that they had best not be given at all unless under the most carefully regulated conditions." What has been said of the bromides will apply to any other medication that is recommended for universal use in epilepsy.

Surgery is of use only in those cases of traumatic origin or those due to growths and in order to obtain results of a lasting nature must be employed at the earliest opportunity. Surgery of the Colon, which was advocated as a cure all a few years ago, is about as effective as the beating of tom-toms by the aboriginee's medicine man, and certainly more harmful.

Diet has its place in the treatment of epilepsy when used intelligently in those cases due to toxemias and disordered metabolism. The enthusiastic claims made for a salt free diet should be taken cum granum salis.

The chronic and feeble minded epilepties should be colonized and protected from society thereby eliminating the danger of reproducing their kind.

In conclusion I wish to again impress upon you that epilepsy is not an entity and the rational way of treating this manifestation is to study the underlying disease and whenever possible to remove it.

Read at the 20th annual session of the Chattahoochie Valley Medical and Surgical Association, Warm Springs, Ga., July 14, 1920.

INSTITUTION OF RAT SURVEYS

C. V. Akin, P. A. Surgeon, U. S. Public Health Service

WITH bubonic plague, both human and rodent in type, actually known to be present in several ports of the United States, it would seem to be both wise and expedient for cities and towns throughout the country to determine the disease of their rat populations.

By means of a carefully conducted rat survey it is possible to know with a fair degree of certainty whether or not rodent plague has been introduced. It is reasonable to believe that plague always exists among rats for some time before the infection is transmitted to human beings. It follows quite logically that if the presence of plague among rats be ascertained early during this interval prompt and active control measures may interrupt the passage of the human subject. The value of such "health insurance" cannot be denied.

Economically, a rat survey, with the consequent killing of a large number of rats, is decidely a good investment. Conducted with due regard for cost of operation a survey will pay for iself in actual saving of food products, and in preventing destruction of stored goods and fixtures.

Before instituting a rat survey certain principles of conduct should be clearly understood.

The primary object of the investigation is to secure well preserved specimens for laboratory examination. To afford data of determinative significance, specimens must be taken generally from all parts of a community, and in sufficient numbers to represent the rat population of any given section.

Observers agree that there is at least one rat per capita of human population in urban communities. These animals are not to be found uniformly distributed throughout a community, but, because of location and accessibility of food supplies and favorable hiding and harboring places, concentrate themselves in selected areas.

In order to define centers of rat infestation, a preliminary survey should

be undertaken. Only in this manner can the useless expense of trapping sterile areas be avoided. The information gained from this study will permit an accurate estimate of the number of trappers needed, and of the quantity of traps and other equipment required to secure a predetermined number of rodents.

As an arbiturary standard of trapping, it has been suggested that 10% of the estimated rat population be fixed as the number to be examined. The examination of 1,000 rats per 10,000 of human population will afford reliable evidence of the occurrence of plague.

The major requirements for the conduct of a rat survey divide themselves into seven section. These are essential and are not analyzed in the order of their relative importance.

1. SUPERVISION

The success of the rat survey, both hygienic and economic, depends upon the careful, personal attention given its conduct by the individual in charge. Every detail of administration, the preliminary survey, the selecting and purchasing of equipment, the employment of trappers, and the collection and examination of specimens should have the attention of some one responsible person.

The community health officer is the person of choice for this important duty.

2. Estimate of Needs and Expenditures:

The expenses of a rat survey will be determined largely by the number of specimens to be taken, and by the existing resources of the community for handling the specimens. Factors to be considered are: area to cover in trapping operations; period of time to be devoted to the campaign; and number of trappers to be used to produce results in the time given.

The cost of capturing and examining a rat has been variously estimated at from thirty-eight cents to two dollars. The first figure is considerably lower than the average, and the latter about 100% excessive.

Certain tentative unit figures are suggested:

(a) From 2 to 4 trappers will be required to cover each square mile of territory. The size of the trapping district assigned each man will vary with the type of habitation.

(b) Each trapper should have a base supply of 100 snap traps with a reserve of 100.

(c) Salary of trappers will vary with locality but should not exceed $75.00 per month.

(d) A bounty should be offered to stimulate trapping. A general bounty of 10 cents per rat, dead or alive, should suffice.

(e) Total cost of a trapper's equipment, including 200 traps, should not exceed $40.00.

(f) Cost of transporation varies.

3. Equipment

With the possible exception of traps all essential equipment can be purchased locally.

Each trapper is provided with the following articles:

200 Snap traps;

12 quart galvanized bucket with tight cover;

6 inch side cutting light;

Brush (paint) for oiling traps;

Brush (wire bristles) for cleaning traps.

Triangular file;

Cord for securing traps;

String for fixing identification tags to specimens;

Tags.

4. Transportation:

Motor transportation is necessary to save time in two important operations. First, in distributing trappers in the early morning, and for collecting the catch and taking it to the laboratory. One small touring car will serve these purposes and also assist in maintaining supervision.

5. Trapping of Specimens

For survey purposes, no other method than trapping need be considered for securing specimens fit for laboratory examination.

Success in trapping depends entirely upon the careful, intelligent handling, baiting, and placing of traps. A trapper must study the habits and appetites of the animal he plans to capture.

The major portion of each day should be spent in preparing and cleaning traps, and in locating promising rat runs and hiding places. The afternoon hours are best devoted to this work as the best catches are made at night.

Collection of Specimens.

No time should be lost between the trapping of rats and their delivery to the laboratory. Putrid specimens are of doubtful value.

The trapper is required to collect his catch early in the morning, working his district in such a manner that he will arrive with his catch at a fixed point at a designated time. Operating on a fixed schedule, an automobile will be driven from point to point collecting the various catches which are placed in a large metal can partly filled with a pulicide. The alternative to this method is for trappers to deliver catches to a central station where they are dipped in pulicide before being taken to the laboratory.

Trapping hours and hours of collection must be arranged to meet local conditions but the various operations must be timed in sequence so that cooperation between field-force and laboratory is perfect.

7. Laboratory.

Any laboratory affording from 250 to 300 square feet of floor space in a well lighted, well ventilated room will provide quarters for handling 300 specimens in a a single catch.

The examination of rats for plagues resolves itself into two parts: the recording and autopsying, to be undertaken by assistants, and the bacteriological tests, to be performed only by a skilled technician.

Careful numerical records should be kept of all rats handled, and exact data kept concerning the condition of specimens.

The technique of examination and the precautions to be observed are discussed in special publications of the Public Health Service.

Special Points

For a rat survey to be of value the data collected must be as exactly correct as painstaking care will insure.

If rodent plague is discovered in a community it will be necessary to know, not only that plague is present, but the exact location from which the infected animal was taken. For this reason too much care cannot be exercised in the preparation of identifying tags to be affixed when the rat is taken from the trap. The interest of the trapper may be kept alive on this point if a bounty of five dollars or more be offered for each properly identified plague infected rat.

The selection of bait involves questions, both of cost and efficiency. Baker's bread (white) meets all requirements, being attractive to both rats and mice, easily obtainable, and less expensive than other baits.

Kerosene is a excellent pulicide.

Unless large catches are made during daylight hours only one delivery a day need be made to the laboratory. All traps must be emptied every morning to prevent the nuisance of decomposing rats.

The development of a rat survey should be made the occasion of popularizing rat eradicative measures among the general population. This general activity should be separate and distinct from the organized effort of the community authorities.

SOME RECENT EXPERIENCE IN KIDNEY SURGERY

By G. T. Tyler, M. D., Greenville, S. C.

WHEN we review the history of kidney disease, and note that surgical conditions were recognized and treated even in the days of Hippocrates, it is surprising that only within the past two decades, I might say one decade, that operative risk has been reduced to a safe margin, and the mortality fallen to a small per centage. The results obtained at the best clinics are possible only because of the more intensive study of renal conditions, and by withholding operative interference until the patient has been put into a state of comparative safety. Metabolism determinations, chemistry of the blood, and X-Ray examinations were made; but only after kidney function tests were used, were all centered upon kidney disease—with the favorable results mentioned. This is in keeping with the saying of Dr. Wm. H. Welch, uttered more than twenty years ago, that the physiological chemist holds the key to the future of medicine.

Read before the South Carolina Medical Association, April 21, 1920, Greenville, S. C.

My experience in kidney surgery has been limited. Within the last few years and especially within the past year, I have seen cases of kidney stone and infection which may be of interest to the members of this Association. My cases of stone in the kidney are five. Four I have operated upon; the fifth is under observation. They are all cases of single stone. All have been in women; four of them were in the left kidney, one in the right. One patient had passed a stone from the same kidney (the left) seven years previously. One was told fifteen years ago that the attack of pain in the left kidney region was caused by a stone. One patient complained of pain in the left kidney for ten months; but sought treatment only when the right also began to give symptoms. One has stone in the left, with hydronephrosis of the right kidney. One had symptoms for only six months when X-ray examination revealed stone in the right kidney.

My experience has been most instructive to me. It is remarkable how little some kidney sare effected by the presence of a stone, even of large size. Others again have function very seriously impaired. This depends on the location of the stone—whether it causes obstruction in an effort to pass out the ureter—and whether there is absorption of toxic material from other sources in the body—prostate, intestinal tract, teeth, tonsils, and paranasal sinuses. One patient with a history dating fifteen years, with pus from that kidney at the time I saw her, had on repeated functional tests, a phthalein elimination only 5% less than the other kidney. Here there was free escape of urine from the involved kidney. The stone was temporarily side-tracked, with little embarrassment. Another patient with symptoms dating ten months, had even better function in the kidney containing the

stone than the other. Again after the removal of the stone, impaired function is soon regained, even though the removal may be attained with considerable damage to the kidney or its pelvis. In one patient the kidney was exposed, and the pelvis accidentally opened in an effort to free every dense adhesion about it. Through this opening I could feel the stone with the tip of a clamp, but could not remove it until I opened the kidney. Between a finger in this opening and the thumb outside I could grasp the stone: then through a second incision in the pelvis, it was removed. The question of taking out the kidney because of injury to its pelvis was debated at this stage. Fortunately the perirenal fat was available to cover the sutures uniting the pelvis and kidney. The kidney opening was closed with mattress sutures. Although this patient had a hemorrhage around the kidney, producing a considerable tumor, the function of that kidney 2 months after operation was 20% of phthalein in 15 minutes, while the other secreted 25%. That hemorrhage occurred in this case and not in the others is in keeping with other reports—that it is more likely where the stone has been removed through incision in the kidney substance.

In the examination—using the Kelly method—one cannot judge of the kidney from mere observation of the ureteral orifices. I have used, and continue to use, wax-tipped catheters; but in only one case was there a scratch noted on it; and on exploration no stone was found. This is easily understood, for the stone lay outside the course followed by the catheter. X-Ray examination determined the presence of the stone except in one case. Here the history, examination of the urine—I did not use a wax-tipped catheter in this ureter— and physical findings suggested a stone in spite of a negative X-Ray. Exploration revealed the stone in the kidney pelvis. Except in the case reported, I have been able to remove the stone by pyelotomy.

The presence of stone in one kidney with involvement of the other is often a puzzling question. One patient with stone in the kidney, and urine from that side loaded with pus, gave a very low phthalein elimination. It did not seem wise to operate in the presence of this low function. Pelvis lavage was done repeatedly with almost complete disappearance of the pus from the urine on that side. After six weeks' treatment indigo carmine injected into the gluteal muscle appeared in the left urine sooner than from the right. A pyelitis appeared in the right kidney. Though I had taken a careful history, the patient at this time said she had been troubled for—she does not remember how many—years. From that time to the present my attention has been devoted to the right kidney. Its pelvis capacity is 90cc; its function much less than the left. I have advised that the stone be removed from the left kidney; but operation has not been done. In this patient the kidney pelvis have been lavaged forty times, with the result that after eight months of treatment the phthalein elimination from both kidneys is 25% in 20 minutes, 10% being from the right side. The patient is in excellent health, and except for pain in the right kidney region from retained urine, she has little discomfort. Here the induction of adequate drainage has caused improvement together with the injection of silver nitrate and Mercurchrome—220 into the kidney pelves.

I wish to cite three additional cases —one was a perinephritic abscess from a ruptured pus kidney. The abscess was aspirated, then drained through an incision in the left flank. Later I

removed the kidney. After laboring to free it, I finally succeeded in easily doing a subcapsular enucleation. In this patient, adhesions were dense, the kidney lay well up beneath the diaphragm. In freeing these adhesions, I accidentally opened the pleura. Immediate closure was followed by no untoward result. The patient is in excellent health at present. I think this abscess could have been prevented by the early recognition of a pyelitis and the use of proper treatment.

Except in the case where the scratch on the wax-tipped catheter did not prove to be from stone, all the diagnosis were made and confirmed by differential urinary and X-Ray findings. In this case the diagnosis was appendicitis; but was disproved by obtaining a specimen of urine from the right kidney. At the time of the attack, the patient had several boils over the buttocks and back. The kidney infection was probably secondary to them. In this patient, the cloudy urine ran in a stream from the ureteral catheter. The capacity of the kidney pelvis was 20cc; its function in one hour 15%, while that of the left was 35%. When put down from the knee-chest position, the patient said: The pain in my back is gone.

One case of chills with daily elevation of temperature, and pus in the urine from the right kidney and marked tenderness over it, revealed on exploration, multiple abscesses, necessitating its removal. Phthalein output of the remaining kidney in one hour was 40%.

I feel that these results have been obtained only by the conservation of the kidney function, and by the effort to make the patient a safe risk before undertaking operation.

DISCUSSION—

Dr. Archibald Baker, Charleston: This is a very interesting paper on kidney surgery and I wish to emphasize Dr. Tyler's thoroughness in working out the pathology of the kidney and in estimating the function of the kidney. In doing this it is not only necessary to find whether there is pus, blood or sugar in the urine but to learn about the functional efficiency of the kidney. This is a comparatively modern thing in surgery and it is important not only when the kidney is to be removed, but in any operation we should know about the functional efficiency of the kidney. A surgeon would not think of operating without knowing something about the heart, neither should he operate without knowing something about the kidney. The urologist tells us there is some pus and blood in the urine and then we find out which kidney is at fault. We cannot tell whether the pus is due to a pyelitis or a pyelonephritis, but we can use the X-Ray to find out if stones are present. If they are then surgery is demanded. If the pus is due to pyelitis then we must depend upon the urologist to treat the condition. The day of treating pyelitis by urotropin and internal medicines is practically over. It is estimated that 90 per cent of the cases of pyelitis are due to infection either from the colon bacillus or some other infection in the body and in this event internal treatment given little relief.

If I may draw a comparison, it is that the X-Ray is useful in finding stone in the kidney but not in the gallbladder. If the X-Ray says there is a stone in the kidney it is there—if the X-Ray says there is no stone in the kidney—then there is no stone in the kidney. That is in contrast to the value of the X-Ray in gallbladder stone. In the diagnosis of stone in the gallbladder the X-Ray is of little

value. There must be three per cent lime in a stone before it will cast a shadow, and gallstones are often largely made up of cholesterin and soft material which cannot be demonstrated by the X-Ray; there is a form of pyelitis which goes on to abscess formation.

DISCUSSION—

Dr. William A. Barron, Columbia: One point I want to stress. If there is anything I dislike it is to see an indifference of opinion. If we ask an internist into consultation and he tells us thus and so might be the case, it does not help us much. Very often in this particular field of work we have no right to give anybody a definite clean-cut opinion on one or two differential tests. What I want to impress and accentuate is that if you ask that this work be done you do not try to hasten it too much. We have had tests that were absolutely negative on the first and second tests and even the X-Ray was negative, but persistent work and accurate differential estimations would lead later to a clean-cut diagnosis.

Dr. M. H. Wyman, Columbia: The etiology of kidney stones varies and it is of interest and of practical value to discuss the question of whether there is any way to prevent their formation. I looked up this subject for a little society in Columbia and found that there is nothing in the textbooks on this subject. One authoritity finds that there are more kidney stones in India and Egypt than elsewhere and that over there bilharziasis has been demonstrated as the infecting agent. It it is held that all stones are due to infection and that all stones have an infected nucleus.

Another proposition is when to remove only the stone and when to remove the kidney. That cannot be decided from the urologist's standpoint alone, but the surgeon must gather data and make the decision. Sometimes the function of a kidney may be very low, but after the stone has been removed the function picks up. Sometimes the kidney substance after the stone has been removed will undergo a wonderful regeneration. One man attempted to show that the phthalein test for the function was of no value. He removed one half of a dog's kidney and the remainder improved in function so that the function was as good as before; he then removed another portion of the kidney so that the dog had only one-third of a kidney and the function was still good and this remaining part of the kidney was maintaining a normal kidney function. He held that this showed that the phthalein test was of no value, but it is to be remembered that he was dealing with healthy dogs in which the kidney readily regenerated. The phthalein test of kidney function is accurate if properly interpreted. We must have trained laboratory men to help out the surgeon.

DISCUSSION—

Dr. Tyler: In closing: It is my own observation that have led to these views especially for the differential tests with phthalein. It is better to do a total phthalein test first and to find the total active capacity; then make the differential tests and find the function of each kidney. One cannot always tell how much apparent impairment of function may be due to the presence of a catheter in the ureter. I have seen that in some of my cases. The total phthalein excretion would be good and then when the catheter was in place one would be surprised to find the total phthalein diminished. This result was sometimes difficult to interpret properly. Such instances serve to emphasize the fact that it is only by repeated tests that we are able to arrive at the proper conclusion.

ABSTRACTS

INFECTIOUS ECZEMATOID DERMATITIS.

In a series of seventy-four case histories, selected at random and scattered over a period of two years, Richard L. Sutton, Kansas City, Mo. (Journal A. M. A., Oct. 9, 1920, found a record of concurrent urticarial eruptions in nineteen instances (more than 25 per cent.), The antecedent disorders varied greatly, but were fairly characteristic: lacerated, infected wound of the hand; furuncle of the right thigh; scabies; infected ingrowing toe-nail; ecthyma; infected wound of the right forefinger; otitis media; infected, incised wound of the right hand; infectious discharge from the nose; infected wound of the right shin; furuncle of the left axilla; paronychia; infected wound of the thumb, and furuncle of the scalp. As a rule, the anaphylactic manifestations did not appear until after the staphylococcic disorder was well under way. All of the attacks were nonfebrile. As a rule, the earlier lesions were frankly suppurative (of fourteen cases in which cultures were made, Staphylococcus aureus was recovered in eleven), and autoinoculable. In the later, more generalized eruptions, however, attempted cultivation frequently proved unsuccessful. In the earlier stages of the disease Suttor has found that a mild astringent, such as an aqueous solution of aluminum acetate (0.5 per cent.), or even lead and opium lotion (lotio opii et plumbi subacetatis(is more effective than one of the greasy preparation. At the end of forty-eight or seventy-two hours, however, one may profitably begin the use of a weak ammoniated mercury ointment (2 per cent.), together with a bland dusting powder containing a small amount of boris acid. After the tendency to suppuration has been overcome, phenolated zinc oil may be substituted for the mercurial ointment. For the relief of the pruritus which often accompanies the urticarial lesions, calamine lotion, to which liquor carbonis detergens (from 2 to 10 per cent.) has been added, affords much relief. If necessary, a small amount of phenol (1 per cent.) or menthol (0.5 per cent.) may be added to the ammoniated mercurial preparation, and the ointment used in conjunction with the lotion. Internally, alkaline preparations, such as sodium acetate and sodium citrate in large doses, combined, if the patient is nervous and irritable, with sodium bromid, frequently prove helpful. If these, too, fail, Sutton has found the most serviceable remedy to be a mixed staphylococcus vaccine. The initial dose should be small (from 25,000,000 to 75,000,000), and he usually repeats the injections every third day, gradually increasing the amount each time.

INTRACRANIAL LESIONS INVOLVING AUDITORY-VESTIBULAR APPARATUS.

A brief summary of the important practical points utilized in the examination of neurotologic cases is made by E. R. Carpenter, Dallas, Texas, (Journal A. M. A., Aug. 14, 1920). Intracranial lesions involving the auditory-vestibular apparatus are considered to advantage under three heads: (1) lesions primarily involving the cerebellar fossa; (2) lesions primarily involving the brain stem and midbrain and (3) lesions primarly involved the cerebral vortex and sub-

cortex region. At least fifty per cent. of all cases of brain syphilis present some impairment of the auditory-vestibular apparatus; and in many cases bilateral lowering of the high tones and raising of the lower tones, with subnormal vestibular reaction, are the earliest indications of approaching trouble. Neuritis of the eighth nerve, syphilitic meningitis and gummas are the forms of syphilis most often encountered in the cerebellar region. Carpenter emphasizes that the localization of intracranial lesions involving the auditory-vestibular apparatus requires more knowledge of the nerve system than is usually taught in postgraduate work on otology. As this specialty has so much in common with intracarnial work, possibly selected courses on brain anatomy neurology and special operative work in addition to the regular clinical courses, would be an improvement over the present system of teaching neurotology in our schools.

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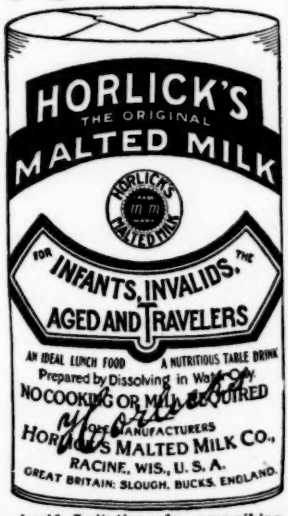
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